

From: [HOPE Bruce](#)
To: [Dana Davoli/R10/USEPA/US@EPA](#)
Cc: [Burt Shephard/R10/USEPA/US@EPA](#); [Chip Humphrey/R10/USEPA/US@EPA](#); [Joe Goulet/R10/USEPA/US@EPA](#); [rgensemer@parametrix.com](#); [Eric Blischke/R10/USEPA/US@EPA](#)
Subject: RE: Fw: Food Web Model Fish Tissue Requirements
Date: 02/13/2006 04:50 PM

-----Original Message-----

From: Davoli.Dana@epamail.epa.gov [mailto:Davoli.Dana@epamail.epa.gov]
Sent: Monday, February 13, 2006 1:42 PM
To: HOPE Bruce
Cc: Shephard.Burt@epamail.epa.gov; Humphrey.Chip@epamail.epa.gov;
Goulet.Joe@epamail.epa.gov; rgensemer@parametrix.com;
Blischke.Eric@epamail.epa.gov
Subject: Re: Fw: Food Web Model Fish Tissue Requirements

I know we won't be able to ask for composites of all of the species in each segment, and I wonder if it makes sense since many of the species have large home ranges. If we can't get them in each segment, are there some other criteria for choosing sampling areas for species with large home ranges? (In the first round of sampling, we chose 3 - 6 mile and 6 - 9 mile segments.)

(a) The model deals with home ranges by combining & pro-rating results for as many (or as few) segments were needed to approximate a species range within the harbor

Also, I am not clear if the bass and sculpin composites we have selected (upstream and downstream of the ISA and next to specific sources) will provide the appropriate data for the model.

(b) You don't need samples for every species in the model but, at a minimum, it would be good to have data for the higher trophic level fish.

Would we use the biota data from a specific site (e.g., Willamette Cove) in the model or would we combine the samples from sites from both sides of the river (e.g. Arkema, GASCO, etc) in that segment to use for the FWM?

(c) The model is designed around segments that can be delineated however poorly) in terms of the river's physical characteristics. It doesn't really "see" sites other than to the extent they are in one segment or another.

Are we planning to run the model for specific sites or just segments?

(d) Following along from (c) above, the model runs only for segments - 33 in the river + 1 for shipyard lagoon.

I missed the last few FWM meetings so sorry if this is clearer for everyone else.

I think it would be great if we could have a short conference call on this. Would Wednesday morning work for most people? Or could we talk about it at the TCT if we have one?

Eric
Blischke/R10/USE
PA/US

02/13/2006 11:21
AM

To
Burt Shephard/R10/USEPA/US@EPA,
Joe Goulet/R10/USEPA/US@EPA,
rgensemer@parametrix.com, Dana
Davoli/R10/USEPA/US@EPA
cc
Chip Humphrey/R10/USEPA/US@EPA
Subject
Fw: Food Web Model Fish Tissue
Requirements

Here is what Bruce had to say about individual vs composites. As you can see my comments below, I am leaning towards doing the composites. We may need to discuss further.

Eric

----- Forwarded by Eric Blischke/R10/USEPA/US on 02/13/2006 11:20 AM -----

HOPE Bruce
<HOPE.Bruce@deg.
state.or.us>

To
Eric Blischke/R10/USEPA/US@EPA

02/13/2006 10:40
AM

cc

Subject
RE: Food Web Model Fish Tissue
Requirements

Eric,

I did speak to Bob about composites vs. individual samples. While it would be nice to have individual samples so we could better understand size-residue relationships and other esoterica, composite sampling will produce good estimates of the mean that are readily comparable with the mean estimates produced by the food web model. I think it would be better to direct resources toward getting a composite sample from as many segments (34 at the moment) as possible rather than knowing the details of individual fish in only a few segments.

Bruce

-----Original Message-----

From: Blischke.Eric@epamail.epa.gov
[mailto:Blischke.Eric@epamail.epa.gov]
Sent: Monday, February 13, 2006 10:20 AM
To: HOPE Bruce
Subject: Food Web Model Fish Tissue Requirements

Bruce, at my urging, we are revisiting the issue of whether individual fish tissue samples are required to run the food web model and what additional resolution we get in the model results through the analysis of individual fish. It is my understanding that you had a conversation about this topic with Bob Gensemer the week before last. My concerns with the analysis of individual fish are two-fold: 1) The number of individual fish is significant. During our scoping exercise, we identified 59 individual fish tissue analyses (16 crappie, 15, smallmouth bass, 12 northern pikeminnow, 2 sculpin and 14 largescale sucker). 2) Round 1 fish tissue focused entirely on composites. I am totally supportive of collecting additional composite data to support the foodweb model as well as other site needs and from a temporal standpoint I would rather compare composites with composites.

That said, if there is a compelling need to look at individuals to get a better understanding of the size/contaminant level relationship or get information about variability, I could support this effort. However, I would like to better understand the tradeoffs - i.e., what is the downside associated with not getting the individual samples and getting additional composites instead.

Let me know what you think. Are you available to discuss this sometime this week?

Thanks, Eric